

## Explanations for Each Column of the TERM Report By CIP

Column		Explanation
A	Rank	This is the rank of the CIP (Classification of Instructional Program) by percentile score as shown in column D. Tie scores get tie ranks. Sometimes scores appear to be a tie, but if carried out to more decimal places, are not. Such CIPs are not assigned tie ranks.
B	CIP Code	CIP (Classification of Instructional Programs) code as assigned by the U.S. Department of Education. See Sources note below for more details.
C	CIP Title	The title of the training program, as assigned by the U.S. Department of Education Classification of Instructional Programs.
D	Score	The score is a weighted average of columns E through I. The weights used are 3, 3, 1, 1, 1, respectively. See Calculation Method note below for more details.
E-I	Percentiles	These 5 columns are the percentile scores of the data in columns J through N. Percentiles scores are used to compute different types of data in the model. For example, wages in dollars and growth in percentages. Tie scores produce tie percentiles.
J	Openings	The projected number of openings expected per year for the occupations within this CIP. If an occupation is contained in more than one CIP, its openings are distributed evenly among those CIPs. Projected openings based on recent occupation projections.
K	Hourly Wage	The average of the wages of the occupations contained in this CIP, weighted by the number of openings in each occupation. Wages based on recent Occupational Employment Statistics (OES) survey.
L	O*NET Score	O*NET is an acronym for the Occupational Information Network ( <a href="http://www.onetcenter.org/">http://www.onetcenter.org/</a> ). This data is a measure of the skills, knowledge, and abilities required for the occupations within this CIP, weighted by the number of openings in each occupation. The numerical score for each comparative occupational descriptor in the O*NET Knowledge, Skills, and Abilities data files were summed for each occupation. See Sources note below for more information.
M	Growth Rate	The projected rate of growth in employment of the occupations in this CIP, weighted by the number of openings in each occupation. This number could be negative but usually is not. Occupational growth rate is from recent Occupational Projections produced by the AzDES Research Administration.
N	Turnover Ratio	This is the projected number of annual openings due to growth divided by the projected number of annual openings due to replacement (like retirements, quits, promotions, etc.). Higher ratios indicate lower turnover. Based on recent occupational projections data.
O	BLS Education & Training Code	The job training and educational levels as assigned by the Bureau of Labor Statistics (BLS). See detailed descriptions of the BLS codes on page two of these notes. Note that higher numbers indicate lower amounts of education or training time.

Sources	
1	Openings and wage data are produced by the Arizona Department of Economic Security, Research Administration, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics. Wages are from the current Occupational Employment Statistics (OES) survey, and openings are from recent occupational employment projections.
2	For the O-Net score, the most recent O-Net database was used ( <a href="http://www.onetcenter.org/database.html">www.onetcenter.org/database.html</a> ).
3	CIP / SOC crosswalk source: National Crosswalk Service Center <a href="http://www.xwalkcenter.org/xwxwalk.html#SOCCIP">http://www.xwalkcenter.org/xwxwalk.html#SOCCIP</a>
4	The education levels are from the Bureau of Labor Statistics website at <a href="ftp://ftp.bls.gov/pub/special.requests/ep/optddata/">ftp://ftp.bls.gov/pub/special.requests/ep/optddata/</a>
Calculation method	
1	Hourly wages were calculated by dividing annual wages by 2080. (40 hours/week X 52 weeks)
2	All scores were first calculated by occupation using the SOC (Standard Occupational Code). The scores for each 6-digit SOC were calculated by averaging the scores for the 8-digit SOC's that comprise each 6-digit SOC.
3	The Training and Educational code can be used as a filter. That is, only occupations with selected training and education requirements are included, or all levels can be included. See below for a listing of the different levels.
4	Statistics by CIP (Classification of Instructional Programs) (except openings) were calculated by taking an openings-weighted average of the occupations in the CIP. For occupations appearing in more than one CIP, openings were evenly distributed among the CIPs. For example, if an occupation had 30 openings and was found in 3 CIPs, that occupation would be listed as having 10 openings in each of the 3 CIPs. After the openings were distributed in this manner, the number of openings in each CIP was calculated by summing the openings for each occupation within the CIP.
5	Percentiles were calculated for each statistic shown. In case of a tie, the same percentile was assigned to all CIP's involved in the tie.
6	The following formula determined the score for each CIP: $(3 \times \text{openings percentile} + 3 \times \text{wage percentile} + \text{ONET percentile} + \text{growth percentile} + \text{ratio percentile}) / 5$
BLS Education Codes (for more details, see: <a href="http://www.workforce.az.gov/admin/uploadedPublications/2536_EdTrainDef.pdf">www.workforce.az.gov/admin/uploadedPublications/2536_EdTrainDef.pdf</a> )	
1	First professional degree
2	Doctoral degree
3	Master's degree
4	Bachelor's or higher degree, plus work experience
5	Bachelor's degree
6	Associate degree
7	Post-secondary vocational training
8	Work experience in related occupation
9	Long-term on-the-job training
10	Moderate-term on-the-job training
11	Short-term on-the-job training
Questions and Comments	
	Direct questions or comments to Rick Van Sickle, 602-542-6481, John Graeflin, 602-542-6492, or Don Wehbey, 602-542-3686, at Research Administration, Arizona Department of Economic Security.